

ABSTRACT OF THE DISCLOSURE

A display device with a dithering circuit is provided which can perform dithering on an input video signal without causing flicker and dither noise. A correction value is provided to reduce the difference (average error value) between an average value of brightness levels represented by pixel data corresponding to each of pixels in a pixel group and an average value of brightness levels represented by dither added pixel data corresponding to each of the pixels in the pixel group. This correction value is added to the dither added pixel data for correction. This prevents flicker from being produced even when the assignment of dither coefficients in the pixel group is changed in each field to reduce dither noise. Also provided is a gray scale processing system which can perform gray scale processing on an input video signal without causing problems such as flicker. Control is provided to the operation of a gray scale processing circuit that performs gray scale processing on the input video signal in response to the frequency of the input video signal. This makes it possible to prevent a problem such as flicker even when an input video signal of a relatively high frequency is supplied.